

## OBITUARY.

The Council regret that they have to record the loss by death of the following Fellows and Associates during the past year:—

Fellows:—J. R. Christie.  
 W. K. Clifford.  
 J. T. Cooper.  
 George Creaser.  
 H. M. E. Crofton.  
 Richard Farley.  
 Isaac Fletcher.  
 H. J. Gibson.  
 J. G. C. C. Godsman.  
 Sandford Gorton.  
 The Very Rev. H. P. Hamilton.\*  
 Sir Rowland Hill.  
 C. H. Johns.  
 W. E. Jones.  
 Charles Judd.  
 Rev. H. C. Key.  
 Sir Thomas Maclear.  
 Henry Mann.  
 Rev. J. N. Peill.  
 J. E. Richard.  
 Rev. A. Robertson.  
 Benjamin Templar.  
 John Waterhouse.  
 S. C. Whitbread.  
 Richard Wilding.

Associate:—Prof. J. Lamont.

JAMES ROBERT CHRISTIE, F.R.S., second son of the late Professor S. H. Christie, for some time Secretary of the Royal Society, was born at Woolwich on February 9, 1814, and early acquired from his father a taste for mathematics. In 1837 he was appointed a mathematical master at the Royal Military Academy, Woolwich, and was, ten years later, promoted to the post of first mathematical master in the same institution, an appointment which he held till 1865, when he retired on a pension. Mr. Christie was the author of an "Introduction to Practical Astronomy," in which is given a clear exposition of the principles used in the reduction of observations, and of a "Collection of Elementary Test Questions in Mathematics." He also wrote papers "On the Extension of Budan's Criterion for the

\* An obituary notice of Mr. Hamilton will appear in the next *Annual Report*.

Imaginary Roots of an Equation" (*Phil. Mag.*, 1842), and "On the Use of the Barometric Thermometer for the Determination of Relative Heights" (*Phil. Trans.*, 1846). His chief work was in connection with the Royal Military Academy, where he ably seconded the efforts of his father to raise the character of the mathematical studies at that institution. He died at Norwood on February 28, 1879. He was elected a Fellow of the Society on January 13, 1854.

WILLIAM KINGDON CLIFFORD was born at Exeter on May 4, 1845. His father was a well-known and active citizen, and filled the office of Justice of the Peace; his mother he lost early in life. He was educated at Exeter till 1860, when he was sent to King's College, London. In 1863 he came into residence at Trinity College, Cambridge, having previously obtained a minor scholarship. He was elected a scholar of the College, and graduated as second wrangler in 1867, Mr. Charles Niven being the senior wrangler in that year. He was also second Smith's prizeman. In 1868 he was elected Fellow of Trinity and appointed Assistant Tutor. In 1871 he was elected to the Professorship of Applied Mathematics at University College, London, an office which he held till his death. On April 7, 1875, he married Lucy, daughter of Mr. John Lane, and granddaughter of Blandford Lane, of Barbados. In the spring of 1876 grave indications of a pulmonary disease were noted; these gradually increased, and in April 1878 he was compelled to leave England for the Mediterranean, when he visited Gibraltar, Venice, Malta, &c. There being signs of improvement, he returned to London in August 1878. A relapse, however, took place in September, and his strength began visibly to diminish. At the beginning of 1879 he sailed for Madeira, his friends hardly expecting him to survive the voyage. He arrived there, however, safely, and some weeks were thus added to his life, the change of climate enabling him to spend his last days in ease and comparative enjoyment. He died on March 3, 1879.

His first papers, published while he was an undergraduate, are "Analogues of Pascal's Theorem" (*Quarterly Journal of Mathematics*, vol. vi., 1863) and "On Jacobians and Polar Opposites" (*Messenger of Mathematics*, vol. ii., 1864); one of his last completed papers seems to have been that "On the Classification of Loci," which appears in the *Philosophical Transactions*, 1878. Most of his contributions to mathematics were communicated to the London Mathematical Society. He published in 1877 the first portion of a book entitled *The Elements of Dynamic*, but his health prevented him from completing it. Many of the new terms employed in this work are already coming into general use. He left in manuscript a considerable portion of a book *On the Common Sense of the Exact Sciences*, which is now being edited by Mr. R. C. Rowe, Fellow of Trinity College, Cambridge, and will shortly be printed.